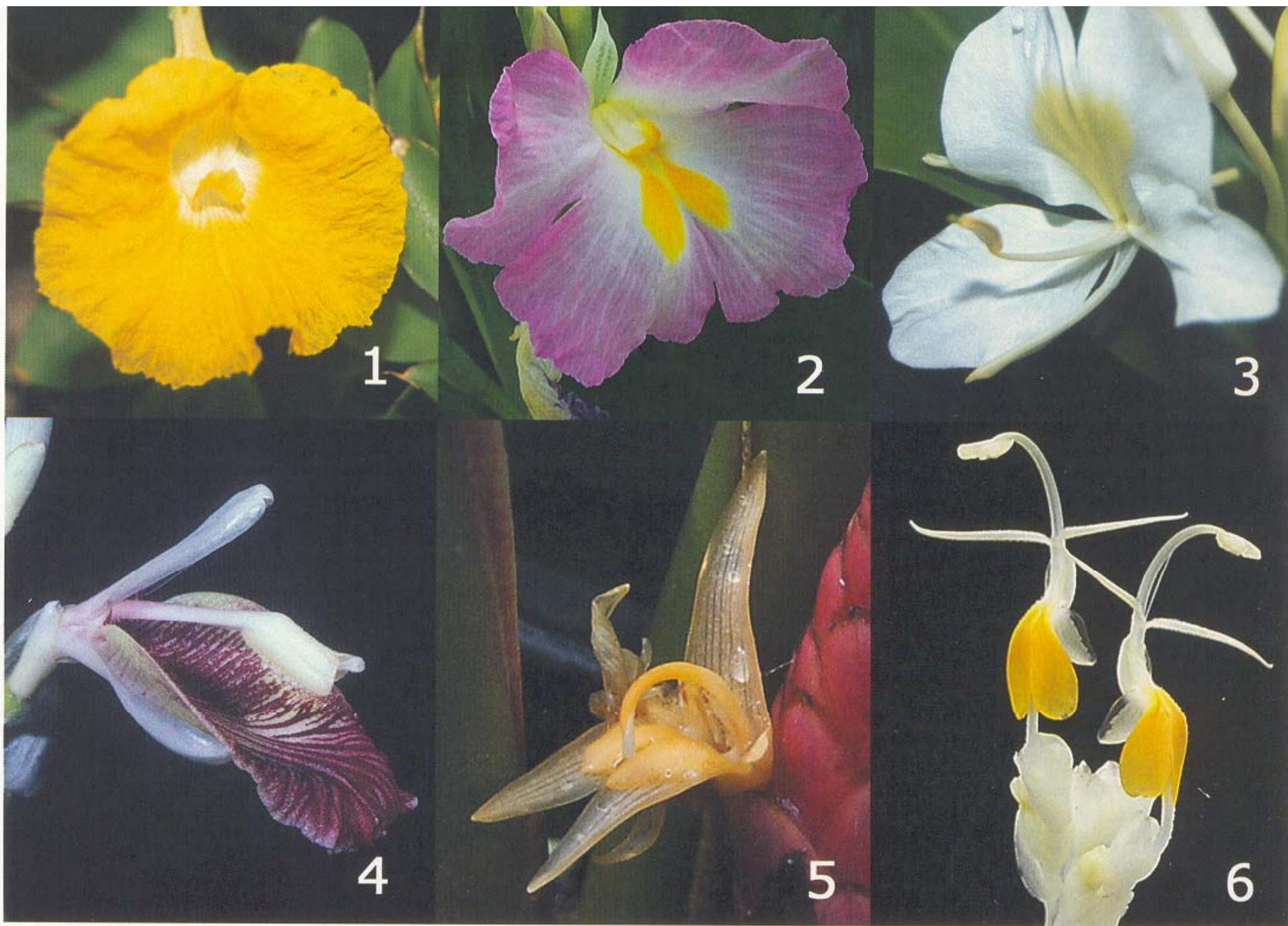
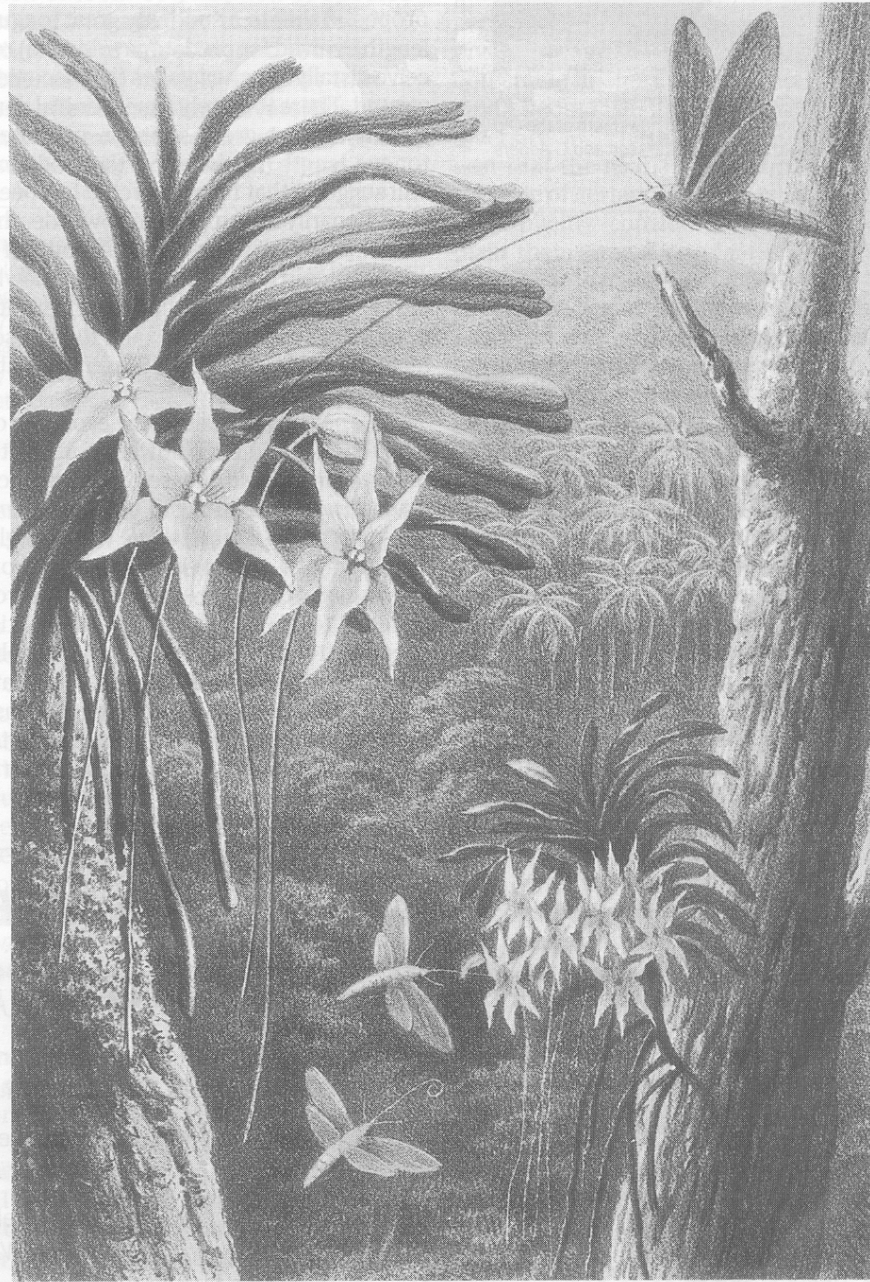


# Introducción

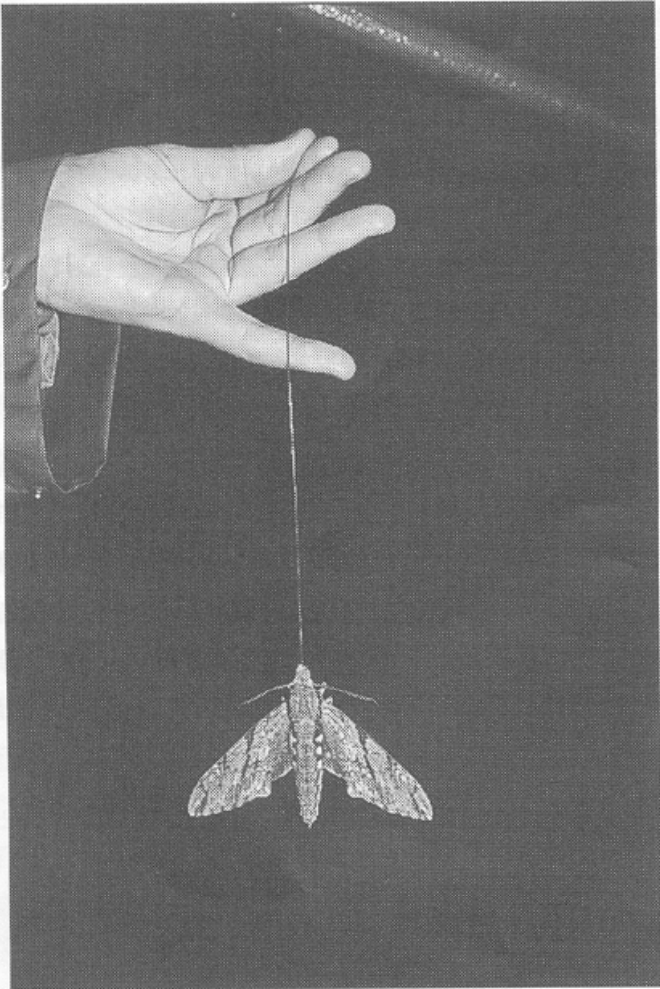


Figs. 1–6. Representatives of the major groups of the family Zingiberaceae and the sister family Costaceae. 1. Costaceae (*Monocostus*). 2. Hedychieae (*Siphonochilus*). 3. Hedychieae (*Hedychium*). 4. Alpinieae (*Alpinia*). 5. Zingibereae (*Zingiber*). 6. Globbeae (*Mantisia*).





**Fig. 1.** Natural selection at its famous extreme. Darwin's predicted pollination of the star orchid of Madagascar as illustrated in Wallace's article<sup>2</sup>.



**Fig. 2.** Madagascar's *Xanthopan morgani praedicta*, the longest-tongued hawkmoth of the Old World. Photo by Börge Pettersson and L. Anders Nilsson.

Nilsson, L.A. 1998.  
Deep flowers for long  
tongues. TREE 13:  
459-460.

**Table 1. Diversity of living seed plants**

	<b>Number of families</b>	<b>Number of species</b>	<b>First appearance (million years ago)</b>
<b>Gingkophyta</b>	1	1	280
<b>Cycadaphyta</b>	3	100	300
<b>Coniferophyta</b>	7	500	330
<b>Gnetales</b>	3	100	200
<b>Angiosperms</b>	500	300 000	120

Gorelick, R. 2001. Did insect pollination cause increased seed plant diversity. Biol. J. Linn. Soc. 74: 407-427.





FIG. 1. A composite phylogeny of angiosperm families. Data on pollination mode (biotic/abiotic) from Ricklefs and Renner's (1994) dataset have been mapped on to the tree and trait evolution reconstructed using MacClade's standard parsimony (Maddison and Maddison 1992). Biologically pollinated families are indicated by a filled rectangle beside the name and abiotically pollinated ones by an open rectangle. Families with both pollination systems, or where there was no data available, have no rectangle. Terminals 'TWO A' and 'TEN A' indicate where the clade to the right fits into the overall tree.

Dodd, ME, J. Silvertown,  
and M.W. Chase. 1999.  
Phylogenetic analysis of  
trait evolution and species  
diversity variation among  
angiosperm families.  
Evolution 53: 732-744.